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FROM:	Mark A. Haynes/Kathryn Marley	
CLIENT/MATTER:	NMTI 1002-6 (10/085,759)	
DATE:	18 MAY 2004	

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Application Serial No. 10/085,759

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Kathryn Marley

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of inventor:

**Michel L. Cote et al.**

Application No. 10/085,759

Confirmation: 1994

Filing Date: 28 February 2002

Title: **Design and Layout of Phase Shifting  
Photolithographic Masks**

Group Art Unit: 1756  
Examiner: Stephen D. Rosasco

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**SUBMISSION OF PRIOR ART AFTER NOTICE OF ALLOWANCE**

Sir:

Applicants submit herewith a PTO Form SB-08 listing art previously cited and signed off by the Examiner. In the original submission of the listed articles, the dates were missing from the citations. This resubmission includes the dates of the articles.

It is respectfully requested that this new PTO Form SB-08 be placed in the record.

Respectfully submitted,

Date: 18 May 2004

Mark A. Haynes

Mark A. Haynes, Reg. No. 30,846

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Sheet	1	of	3	Application Number	10/085,759
				Filing Date	28 February 2002
				First Named Inventor	Michel L. Cote
				Group Art Unit	1756
				Examiner Name	Stephen D. Rosasco
				Attorney Docket Number	NMTI 1002-6

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			T <sup>2</sup>
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C1	SAKATA, MIWA, et al., "A Novel Radiation Sensitive Spin-on-glass Convertible into SiO <sub>2</sub> and the Simple Fabrication Process Using It," 26 July 1993* (*AT&T Bell Labs fax date), 3 pages.	
	C2	PISTOR, THOMAS V., "Rigorous 3D Simulation of Phase Defects in Alternating Phase-Shifting Masks," Proceedings of SPIE 4562-1038 (March 2002), 13 pages	
		OGAWA, KIYOSHI, et al., "Phase Defect Inspection by Differential Interference," Proceedings of SPIE 4409-71, 26 April 2001, 12 pages.	
		RHYINS, P., et al., "Characterization of Quartz Etched PSM Masks for KrF Lithography at the 100 nm node," Proceedings of SPIE 4562 (March 2002), 486-495	
		SEWELL, HARRY, et al., "An Evaluation of the Dual Exposure Technique," (As early as 2002*), 11 pages *The date is based on references 8&9 of the article of 16 Feb 2001 and 27 Feb 2002, respectively.	
		WANG, RUOPING, et al., "Polarized Phase Shift Mask: Concept, Design, and Potential Advantages to Photolithography Process and Physical Design," Proceedings of SPIE 4754-105, 25 April 2002, 12 pages.	
		MATSUOKA, et al., "Application of Alternating Phase-Shifting Mask to 0.16um CMOS Logic Gate Patterns," SPIE Proc. 3051, March 10-14, 1997, 10 pages.	
		SEMMIER, ARMIN, et al., "Application of 3D EMF Simulation for Development and Optimization of Alternating Phase Shifting Masks," Proc. of SPIE 4346-37, 1 March 2001, 12 pages.	
		WONG, ALFRED K., "Polarization Effects in Mask Transmission," Proc. of SPIE 1674, 8 March 1992, 8 pages.	
		ACKMANN, PAUL, et al., "Phase Shifting and Optical Proximity Corrections to Improve CD control on Logic Devices in Manufacturing for sub 0.35 um I-Line," Proc. of SPIE 3051-07, March 1997, 8 pages.	
		SPENCE, C., et al., "Detection of 60 degree Phase defects on Alternating PSMs," Proc. of SPIE 3412-73, April 1998, 2 pages	

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		SUGAWARA, MINORU, et al., "Defect printability study of attenuated phase-shifting masks for specifying inspection sensitivity," Proc. SPIE 2621-49, September 1995, 16 pages	
		SCHMIDT, REGINA, et al., "Impact of Coma on CD Control for Multiphase PSM Designs," Proc. SPIE 3334-02, February 1998, 11 pages.	
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		GRANIK, YURI et al., "CD variation analysis technique and its application to the study of PSM mask misalignment," Proc. SPIE 4186-94, September 2000, 9 pages.	
		ISHIWATA, NAOYUKI, et al., "Fabrication of Phase-Shifting Mask," Proc. SPIE 1463, March 1991, 11 pages.	
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		OZAKI, T., et al., "A 0.15um KrF Lithography for 1Gb DRAM Product using Highly Printable Patterns and Thin Resist Process," 1998 Symposium on VLSI Technology, June 1998, Honolulu, Hawaii, 2 pages.	
		RONSE, KURT, et al., "Comparison of various phase shift strategies and application to 0.35 um ASIC designs," Proc. SPIE 1927, 1993, 15 pages.	
		ROSENBLUTH, ALAN E., et al., "Optimum Mask and Source Patterns to Print a Given Shape," Proc. SPIE 4346-49, 1 March 2001, 17 pages.	

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Sheet	3	of	3	First Named Inventor	Michel L. Cote
				Group Art Unit	1756
				Examiner Name	Stephen D. Rosasco
				Attorney Docket Number	NMTI 1002-6

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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		SUZUKI, AKIYOSHI, et al., "Multilevel imaging system realizing k1=0.3 lithography," Proc. SPIE 3679-36, March 1999, 13 pages.
		VANDENBERGHE, G., et al., "(Sub-) 100nm gate patterning using 248nm alternating PSM," Mentor Graphics White Paper, May 2001, 9 pages
		FRITZE, M., et al., "100-nm Node Lithography With KrF?" 1 February 2001, 14 pages.
		FUKUDA, HIROSHI, et al., "Patterning of Random Interconnect Using Double Exposure of Strong-Type PSMs," Proc. SPIE 4346-695, September 2001, 8 pages.
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		PIERRAT, C., "Investigation of Proximity Effects in Alternating Aperture Phase Shifting Masks," September 2000, 11 pages.
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		MCCALLUM, MARTIN, et al., "Alternating PSM Mask Performance - A Study of Multiple Fabrication Technique Results," Proc. SPIE 4346-723, September 2001, 6 pages.

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